

CONFIRMATION OF FACSIMILE

Claims

1. Apparatus for mixing components for the preparation of products, such as for example foodstuffs, cosmetics and pharmaceuticals, comprising a mixing chamber which is provided with an inlet for the components and an outlet for the product, and mixing means for mixing the components after introduction thereof into the mixing chamber, characterized in that those parts of the ^{apparatus} ~~mixing chamber~~ which will come into contact with the components are defined by a foil material which can be renewed between two successive mixing operations such as to be able to start a mixing operation with an uncontaminated ~~mixing chamber~~ ^{apparatus}.
2. Apparatus according to claim 1, wherein the mixing chamber is defined between two co-operating mould parts, wherein two foil sheets are positioned between the mould parts, said mould parts being movable from an operative position in which they engage each other while clamping together the foil sheets, and an inoperative position in which they are moved apart and allow the foil sheets to be shifted relative to the mould parts.
3. Apparatus according to claim 2, wherein the foil sheets are elongate foil sheets which are moved relative to the apparatus between two successive mixing operations and wherein means for moving the foil sheets are provided, such as for example reels for unwinding and/or winding the foil sheets.
4. Apparatus according to claim 2 or 3, wherein one mould part is a substantially solid member having a recess in its surface facing the other mould part, while the other mould part is a flexible member which in the operative position covers the

recess and sealingly engages those parts of the solid member surrounding the recess, wherein the mixing means comprise movable pressure means for pressing the flexible member into the recess such as to cause the mixing of the components present in the mixing chamber.

5. Apparatus according to claim 4, wherein the mixing means comprise a pressure roll movable towards the solid member for engaging the flexible member and pressing it into the recess, which pressure roll has a contour closely matching the contour of the recess, wherein further the pressure roll is movable to and for along the recess.

6. Apparatus according to claim 1, wherein the mixing chamber is defined by the foil material itself which defines a pre-shaped elongate web with a succession of separate internal cavity structures which each are provided with an inlet and an outlet for communication with the surroundings and which each are shaped such as to promote the mixing of components introduced through the inlet, and wherein the apparatus further preferably comprises a support for a cavity structure of the elongate foil material web and means for moving the elongate web relative to the support between two successive mixing operations, whereas the mixing means preferably comprise movable pressure means for engaging the cavity structure while pressing it against the support.

~~7. Pre-shaped elongate web of foil material for use in an apparatus for mixing components for the preparation of products, said web comprising a succession of separate internal cavity structures which each are provided with an inlet and an outlet for communication with the surroundings and which each~~

~~are shaped such as to promote the mixing of components introduced through the inlet.~~

8. Method for mixing components for the preparation of products, such as for example foodstuffs, cosmetics and pharmaceuticals, ^{in an apparatus} wherein the components are introduced into a mixing chamber which is provided with an inlet for the components and an outlet for the product, whereafter mixing means provide for a mixing of the components in the mixing chamber, ^{apparatus} characterized in that those parts of the ~~mixing~~ ^{apparatus} ~~chamber~~ which will come into contact with the components are defined by a foil material, wherein between two successive mixing operations the foil material is renewed such as to be able to start a following mixing operation with an uncontaminated ^{apparatus} ~~mixing chamber~~.

9. Method according to claim 8, comprising the following steps:

- after completion of a previous mixing or other processing operation opening the outlet and discharging the mixed/processed product;
- thereafter renewing the foil material and closing the outlet;
- opening the inlet and introducing the components to be mixed or processed;
- closing the inlet and activating the mixing means until the mixing or processing operation is completed;
- repeating the above steps for each successive product to be mixed.

10. Method according to claim 9, as carried out with an apparatus according to any of the claims 2-5, wherein the step of renewing the foil material comprises firstly moving apart

the mould parts followed by shifting the foil sheets relative to the mould parts and finally again moving the mould parts into engagement with each other.

11. Method according to claim 9, as carried out with an apparatus according to claim 6, wherein the step of renewing the foil material comprises firstly moving the pressure means away from the support followed by shifting the elongate web relative to the support and finally again moving the pressure means towards the support.